

**IN THE CLAIMS:**

The following is a complete listing of claims in this application.

1. (original) A scalding tunnel (2) for slaughter animals (20), such as pigs or goats, with steam-discharging nozzles (30) mounted in the scalding tunnel and along the path of conveyance (F) of the slaughter animals, characterized in that the nozzles (30) are multicomponent nozzles with at least one connection (40) for steam and one connection (43) for water, whereby the nozzles discharge a mixture of steam and water that is sprayed therein.

2. (original) The scalding tunnel according to claim 1, characterized in that the multicomponent nozzles (30) are arranged in the scalding tunnel (2) in such a way that atmosphere present in the scalding tunnel can be circulated.

3. (currently amended) The scalding tunnel according to claim 1 ~~or 2~~, characterized in that the multicomponent nozzles (30) are arranged, at least for the most part, in the base area of the scalding tunnel (2).

4. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that the multicomponent nozzles (30) are oriented, at least for the most part, in such a way that their discharge jet is directed with a substantial component longitudinally of the scalding tunnel (2).

5. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that one part of the multicomponent nozzles (30) is directed with components in the direction of conveyance (F) of the slaughter animals (20) in the scalding tunnel (2) and another part of the multicomponent nozzles (30) is directed with components opposite to the direction of conveyance (F) of the

slaughter animals (20) in the scalding tunnel (2).

6. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that in plan view, the multicomponent nozzles (30) are arranged, at least for the most part, on one longitudinal side of the scalding tunnel (2).

7. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that a volume control is provided for the amount of steam supplied to the multicomponent nozzles (30).

8. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that a volume control is provided for the amount of water supplied to the multicomponent nozzles (30).

9. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that for temperature control at least one control valve is provided for the amount of steam supplied to at least one multicomponent nozzles (30).

10. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that only a part of the multicomponent nozzles (30) is included in the temperature control.

11. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that all the multicomponent nozzles (30) are included in the temperature control.

12. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that the scalding tunnel (2) is designed without ventilators for circulating its internal atmosphere.

13. (currently amended) The scalding tunnel according to

~~at least one of the preceding claims~~ claim 1, characterized in that the multicomponent nozzle (30) is a dual component nozzle.

14. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that the multicomponent nozzle (30) is oriented to the horizontal in such a way that its direction of longitudinal discharge, relative to the horizontal, describes an angle  $\alpha$ , where in particular  $5^\circ \leq \alpha \leq 15^\circ$ .

15. (currently amended) The scalding tunnel according to ~~at least one of the preceding claims~~ claim 1, characterized in that the multicomponent nozzle (30) describes an angle  $\beta$  relative to the vertical with its direction of longitudinal discharge, where preferably  $30^\circ \leq \beta \leq 50^\circ$ .

16. (original) A method for scalding slaughter animals such as pigs or goats in a scalding tunnel (2), whereby a mixture of steam and water is sprayed in the scalding tunnel, characterized in that the mixture of steam and water is sprayed through multicomponent nozzles (30) arranged directly in the scalding tunnel (2) and to which both water and steam are directly supplied.

17. (original) The method according to claim 16, characterized in that a supersaturated mixture of water and steam is sprayed through the multicomponent nozzles (30).

18. (currently amended) The method according to claim 16 or 17, characterized in that the temperature of the mixture sprayed through the multicomponent nozzles (30) is set such that, on discharge from the multicomponent nozzles, the mixture has a temperature  $T_1$ , where  $T_1 \geq 100^\circ \text{ C}$ , in particular  $T_1 \geq 120^\circ \text{ C}$ , preferably  $120^\circ \text{ C} \leq T_1 \leq 160^\circ \text{ C}$ .

19. (currently amended) The method according to ~~one of the claims 16 to 18~~ claim 16, characterized in that the

temperature of the mixture sprayed through the multicomponent nozzles (30) is set, and/or the multicomponent nozzles are arranged in the scalding tunnel (2), such that the mixture striking the slaughter animal (20) has a temperature  $T_2$ , where in particular  $55^\circ\text{ C} \leq T_2 \leq 70^\circ\text{ C}$ .

20. (currently amended) The method according to ~~one of the claims 16 to 19~~ claim 16, characterized in that the multicomponent nozzles (30) are arranged in the scalding tunnel (2) in such a way that a circulation of the atmosphere present in the scalding tunnel is effected to such a degree that homogeneous or substantially homogeneous humidity conditions prevail in the scalding tunnel.

21. (currently amended) The method according to ~~one of the claims 16 to 20~~ claim 16, characterized in that the scalding tunnel (2) is operated without ventilators.

22. (currently amended) The method according to ~~one of the claims 16 to 21~~ claim 16, characterized in that the multicomponent nozzles (30) are supplied, at least for the most part, with steam at 2 bar to 6 bar superatmospheric pressure.

23. (currently amended) The method according to ~~one of the claims 16 to 22~~ claim 16, characterized in that the multicomponent nozzles (30) are supplied, at least for the most part, with steam at  $120^\circ\text{ C}$  to  $160^\circ\text{ C}$ .

24. (currently amended) The method according to ~~one of the claims 16 to 23~~ claim 16, characterized in that the multicomponent nozzles (30) are supplied, at least for the most part, with saturated or supersaturated steam.

25. (currently amended) The method according to ~~one of the claims 16 to 24~~ claim 16, characterized in that the multicomponent nozzles (30) are supplied, at least for the most part, with water at about 0.2 bar superatmospheric

pressure.

26. (currently amended) The method according to ~~one of the claims 16 to 25~~ claim 16, characterized in that the dual component nozzles (30) are supplied, at least for the most part, with water having a temperature of 20° C to 70° C.

LAW OFFICES  
DENNISON, SCHULTZ, DOUGHERTY & MACDONALD  
SUITE 105  
1727 KING STREET  
ALEXANDRIA, VIRGINIA 22314-2700  
703 837-9600